Memorandum

TO: Ravalli County Planning Department

FROM: Land Use Clinic, University of Montana School of Law

DATE: March 23, 2007

RE: Highway 93 South Corridor Plan

Proposed Commercial Landscape Ordinance/Considerations

OVERVIEW

An appropriately designed landscape plan is essential for each new commercial development. A well executed landscape design will anchor new buildings, blend the new development with the surrounding area, and enhance the environmental, economic, recreational and aesthetic resources of Ravalli County. Landscape adds character and interest to new developments, making them more inviting. A commercial landscape ordinance should be structured to incorporate the efficient use of water, reduce water waste, and establish a structure for the design process including installation and maintenance of landscapes. In the process of landscape design, serious consideration should be given to native species with an overarching goal toward water efficiency and the preservation of both native species and the identity and character of the area. A commercial landscape ordinance may be implemented as part of the Highway 93 South Corridor planning and development regulation.

Certain issues were identified during the Ravalli County Public Meetings on Land Use in the Highway 93 South Corridor, in 2006. Among those issues identified was the need for attractive landscaping for commercial development that occurs along the highway corridor. Included among the chief goals identified in the study were maintenance of the regional character, community appearance, and scenery. Another issue addressed by the respondents was the need for predictability in development. Additionally, landscape design as it pertains to commercial development is directly implicated in the Ravalli County Growth Policy at Countywide Goal 6; Countywide Policy 6.2 and tangentially implicated in the Ravalli County Growth Policy at Goal 2 and Goal 3.

DISCUSSION

General

The Highway 93 South Corridor is facing the strong probability of development and that development has potential for numerous negative and irreversible impacts to the existing scenery and landscape. Future development will necessarily obliterate some existing landscape. Buildings and non-porous surfaces will ultimately replace some existing vegetation.

The currently existing vegetation performs functions beyond aesthetics and economics. Its most immediately recognizable benefit is that of erosion control. The vegetation holds the soil from washing away with the water run-off or blowing away in the wind. It assists in the protection of water purity by filtering the water associated with both runoff and saturation, removing or mitigating the movement of soils, naturally occurring mineral deposits and many synthetic substances. Left unimpeded, these might otherwise be pollutants to the precious resources of surface water and ground water. The existing landscape also contributes to air quality by filtering airborne pollutants.

While the environmental benefits of the current vegetation are important, the aesthetic considerations can not be overstated. The local vegetation of any given area contributes to the uniqueness and identity of that area. The Highway 93 South Corridor is no exception. The local vegetation contributes heavily to the character of the region and to diminish that vegetation without a plan in place for its replacement would forever alter the character and uniqueness of the area. Some primary issues that a commercial landscape ordinance should address are included as follows.

Plant Species: Selection of plant species is an important consideration. The selected plants should be non-invasive, well adapted to the local climate and should survive, once established, with minimal supplemental irrigation. Biodiversity within any given plan is important to avoid a monoculture that may be susceptible to pests or disease. Native species should be given very strong consideration.

Irrigation requirements: Every plan should include a permanent built-in irrigation system installed by a competent licensed contractor. Given the importance of a healthy landscape and the expense of executing the site plans, an irrigation system will help ensure the viability of the project. Irrigation systems should be sized to sustain the landscape through the hottest and driest portions of summer.

Hardscapes: These installations include decks, patios, paths, walkways, courtyards and other similar installations. They may be constructed from wood or a variety of inorganic materials such as paving brick or flagstone. Driveways, sidewalks and formed in place surfaces such as concrete or asphalt are not considered as hardscape. While the use of hardscapes should be limited to only a percentage of the landscaped area, they should be considered because they are pedestrian friendly, water efficient and provide visual interest.

Authority

In accordance with Montana Code Annotated § 76-2-203(1)(a) (2005), zoning regulations must be made in accordance with the growth policy or master plan. The issue of landscaping falls under the broad net cast by the Ravalli County Growth Policy. Countywide Goal 6: Promote and encourage a vibrant, sustainable, healthy economic environment that recognizes existing businesses and attracts new entrepreneurs. Countywide Policy 6.2: Support and encourage quality design and planning for more aesthetic commercial business development. Landscaping is further implicated in the

Ravalli County Growth Policy as follows: Countywide Goal 2: Protect water quality and supply. Countywide Policy 2.2: Develop and adopt incentives to encourage the protection and enhancement of water quality and supply. Countywide policy 2.3: Encourage the protection of water quantity and quality, including the mitigation of adverse cumulative impacts. Countywide Goal 3: Protect air quality. Countywide policy 3.2: Continue to minimize dust and other air pollution by appropriate subdivision regulation. Countywide Policy 3.4: Encourage alternatives to chemical pesticides and herbicides in controlling pests and noxious weeds.

Application

A commercial landscape ordinance should consider the aesthetic and environmental benefits to the area. It should: 1) Provide a process where developers may ascertain the landscaping requirements for commercial development; 2) Ensure that new commercial developments are sufficiently anchored to the community; 3) Strive to retain the aesthetic character and identity of the Ravalli County Highway 93 South Corridor; 4) Promote water efficiency; and 5) Protect the precious natural resources of the Ravalli County Highway 93 South Corridor including surface water, ground water and native plant species.

Landscaping provides a creative opportunity for individual expression in any given development. Along with this opportunity comes a tremendous responsibility to the Highway 93 South Corridor and to its residents. Landscaping should be an accurate reflection of local attitude and history. The design process should consider what types of plant species are appropriate, how to insure the viability of selected species, long term and cumulative implications, and the proposed use and its relationship to future use. For illustrative purposes the following sample language is provided.

SAMPLE REGULATORY LANGUAGE

The following provisions would apply only to developments in areas that are zoned for commercial uses.

SECTION 1 - DEFINITIONS

Unless specifically defined below, words or phrases used in this Regulation shall be interpreted so as to give them the meaning they have in common usage and to give this Section its most reasonable application.

"Established landscape" means the point at which plants in the landscape have developed roots into the soil adjacent to the root ball.

"Hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same watering schedule.

"Landscaped area" means the entire parcel less the building footprint, driveways, and non-irrigated portions of parking lots. Water features are included in the calculation of the landscaped area.

"Landscaping and/or landscape improvements" means plantings of grass, shrubs, trees or similar living plants, with minimal use of other ground surface treatment such as decorative rock, bark, or stone.

"Mulch" means any material such as leaves, bark, straw, gravel or other materials left loose and applied to the soil surface for the beneficial purpose of reducing evaporation.

"Sight distance triangle" is the area on each side of a street or driveway intersection, measured from the intersecting point of the extended flow lines of the streets or street and driveway, to the points 50 feet back from that intersecting point, that is intended to remain free of obstructions that may impair a driver's safe sight distance to oncoming traffic

SECTION 2 – LANDSCAPE DESIGN

- 2.1 All commercial land development applications shall be accompanied by an appropriate landscape design plan.
- 2.2 Landscape improvements shall be an integral part of the overall site design for each property. Landscape improvements shall be designed to complement and enhance the character of the surrounding area and shall follow these guidelines:
 - a. Landscaped areas shall be configured to maximize their interconnectivity within the site, to natural areas and to landscaped areas in adjacent developments. Small, isolated islands of landscaping shall be avoided except as required in parking lots and for screening roadways.
 - b. Landscape improvements shall be consistent with the character of the proposed development and the surrounding area to reinforce neighborhood identity.
 - c. Landscape design shall enhance natural features, drainage ways and environmental resources.
 - d. All landscape improvements shall be designed for mature landscapes and shall provide appropriate visibility for cars and pedestrians.
 - e. Landscaping shall be no more than thirty (30) inches high when located in a sight distance triangle of street intersections.
- 2.3 Landscape improvements shall be designed with water-efficiency as a goal. These guidelines shall apply to the design of all regulated landscapes:

- a. Landscapes shall use the following design principles to facilitate water conservation:
 - i. Well-planned planting schemes;
 - ii. Appropriate turf selection to minimize the use of bluegrass;
 - iii. Use of mulch to maintain soil moisture and reduce evaporation;
 - iv. Improvement of the soil with organic matter if needed;
 - v. Efficient irrigation systems; and
 - vi. Proper maintenance and irrigation schedules.
- b. Plants having similar water use shall be grouped together in distinct hydrozones, which shall be shown on the landscape plan.
- c. Plants shall be selected appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the site. Protection and preservation of native species and natural areas is encouraged. The planting of trees is encouraged wherever it is consistent with the other provisions of this ordinance.
- d. All plantable areas not covered with turf shall be covered with a minimum of four (4) inches of a suitable mulch to retain water, and inhibit weeds. Nonporous fabrics (like black plastic) shall not be placed under mulches.
- e. Soil preparation shall be suitable for the plants. Soil preparation shall include amendment with organic or other planting soil as specified by the landscape designer or landscape architect.
- i. Recirculating water shall be used for decorative water features.
- j. Artificial plants, artificial grass, and other artificial plant material are prohibited.
- 2.4 All landscaping shall be irrigated as required for plant establishment and maintenance. Irrigation methods shall be appropriate to the type and scope of the improvements. Irrigation system improvements shall be designed to achieve water-efficiency as a goal. All irrigation systems must comply with applicable plumbing codes and shall be professionally designed and installed. Hand watering shall not be allowed as the sole source of irrigation. Automatic rain shut-off devices are recommended.
- 2.5 All landscapes shall strive to maximize the use of native species. Where native material is not appropriate for the intended use or appearance, plant species that are regionally adapted and noninvasive may be used. Landscapes shall consist of a variety of species to enhance biodiversity. No single species may make up more than twenty-five (25) percent of the total non-grass plant materials on the site.
- 2.6. Buildings and parking areas shall be located with a goal to preserve and promote the health of existing trees, environmental resources and natural drainage ways.

- 2.7. Plants shall be selected to blend with the native vegetation for projects at the interface between urban areas and natural open space (non-irrigated). Locally recognized invasive introduced plants are unacceptable. Plants with low fuel volume and/or low flammability shall be emphasized.
- 2.8 All areas disturbed by construction shall be reseeded to prevent erosion. Native, noninvasive grasses shall be used for revegetation where practical. Weed control is the responsibility of the landowner on all reseeded areas and all preservation areas. A noxious weed mitigation/revegetation plan approved by the Ravalli County Weed Board shall be a part of the required landscaping plan.
- 2.9 Anchor structures in the landscape through the use of trees, shrubs and groundcover. The size and intensity of plantings shall be appropriate to the size and context of the improvements. Integrate adjacent land uses of different intensities through a combination of berms, plantings and fencing. A fence shall not be the only screening material used.
- 2.10 Use landscaping to provide a transition from developed, managed landscape to more natural vegetation.
- 2.11 Required landscape improvements shall be installed prior to issuance of a Certificate of Occupancy for all structures, where applicable. If weather conditions prevent installation, the developer shall post a financial guarantee for the improvements. This guarantee shall be released upon completion of the installation of the landscaping.
- 2.12 In order to provide for the ongoing health and appearance of landscape improvements, all required landscaping for regulated landscapes shall be maintained and replaced by the landowner/occupant as necessary. All property owners/occupants shall be responsible for maintenance of landscaping within the portion of the public street right-of-way between the back of the curb or street pavement and the adjacent property.

SECTION 3 - LANDSCAPE MINIMUM REQUIREMENTS

- 3.1 Minimum landscape requirements every commercial development shall be landscaped in a manner consistent with this ordinance. At a minimum, landscaping on a site shall comply with both the following standards:
 - a. The entire balance of a site that is not otherwise occupied by building footprints, parking areas, loading and unloading areas and street rights-of-way shall be landscaped area.
 - b. At least 20% of the site (gross) shall be landscaped area.
- 3.2 Site trees plant a minimum of one (1) tree per one thousand (1,000) square feet of landscaped area, distributed on the site. Trees required by this ordinance shall meet the following criteria.

- a. Minimum planting height of eight (8) feet.
- b. Minimum caliper size of two (2) inches measured at four (4) feet above grade.
- 3.3 Shrubs plant a minimum of one (1) shrub per one hundred fifty (150) square feet of landscaped area. Group shrubs and distribute throughout the site. Trees may be substituted for up to one-half ($\frac{1}{2}$) of the required shrubs at the rate of one (1) tree for ten (10) shrubs. Shrubs required by this ordinance shall be a minimum size of five (5) gallons.
- 3.4 Groundcover live groundcover shall be provided as appropriate to the use and function of the area, including grass, trees, flowers, or shrubs. Hardscape may be substituted for groundcover if the area functions as pedestrian access to storefronts and is integrated into the overall design of the other improvements on the site and is given prior approval. Where it is appropriate, native grass is recommended. Native grass must be weed free and maintained at an appropriate height for each species.
- 3.5 Landscape setback to parking lots thirty (30) feet from arterials or twenty-five (25) feet from other streets. The purpose of the setback is to provide a buffer between street parking areas. These buffers shall be landscaped in accordance with this ordinance and may be included in the minimum 20% onsite landscaping requirement.
- 3.6 Highway frontage landscaping standard fifty (50) foot landscaped setback from the highway right-of-way to any structures or parking lot. The purpose of the landscaped setback is to provide a visual and noise break between the highway and structures or parking areas. These setback areas shall be landscaped in accordance with this regulation.
- 3.7 Parking lot landscaping standard parking lot landscaping is intended to break up large expanses of pavement, create shade, shield views of parking lots from adjacent streets and development and enhance the overall appearance of each project.
 - a. Applicability All parking lots with ten (10) spaces or more shall be subject to these requirements.
 - i. Site trees a minimum of one (1) tree per five (5) parking spaces. Group trees together in islands which are a minimum of ten (10) feet wide. Use the landscaping to break up large expanses of pavement and to create a tree canopy for summer shade.
 - ii. Shrubs a minimum of one (1) shrub per one hundred fifty (150) square feet of landscaped area. Group plantings in landscape islands.
 - iii. Groundcover limit areas of irrigated turf. Grass is discouraged in areas less than ten (10) feet wide. Install a grass buffer (native grass where possible) around the perimeter to filter runoff and improve water quality.

SECTION 4 – STORM DRAINAGE FACILITIES

- 4.1 To promote innovative and effective land and water management techniques that protect and enhance water quality, landscaping associated with storm drainage facilities shall be integrated into the overall design of the project. It shall enhance the overall appearance of the project, prevent erosion and improve water quality of storm water runoff whenever possible. The use of planting strips and shallow, landscaped depressions in parking lots and along roads is encouraged to help trap and remove pollutants from storm water runoff.
- 4.2 All storm drainage facilities shall be appropriately landscaped to the following minimum requirements.
 - a. All facilities shall be seeded to grass appropriate to the function of the area.
 - b. Maximum side slope on drainage facilities shall be 4:1, minimum slope of the bottom of a drainage facility shall be one-half ($\frac{1}{2}$) percent.
 - c. Landscape improvements shall be designed to enhance the function of the facility.
 - d. Habitat and water quality enhancement including wetland plantings in low wet areas is encouraged.